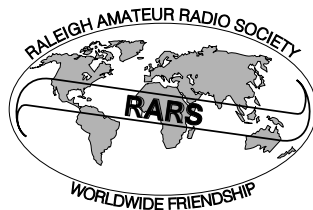


The RARS *EXCITER*



No. 337, May 1998

RARS Webpage: <http://rtpnet.org/~rars>

64 on 64 or W4DW returns to 2 Meters

146.64 is back on the air and is officially (or at least that is our story) is at 64ft.! Now that's a far cry from 500 feet, but is better than being tied with rubber cord to the back



railing of a building, which is where it has been for a week. So, for now we are "The 64 at 64".

We finished the job on Saturday just about darktime. The transmitter is only running about 10watts and there will be no autopatch, but we are back on the air. the .190 repeater is still going to be used as our backup and many people have expressed what good coverage it has for them.

It was a lot of hard work, of

See **64 on 64** page 5

NEW SKYWARN EC APPOINTED

Thomas Babb KF4JKQ has been appointed as the new SKYWARN Emergency Coordinator for the Raleigh Area. Thomas is planning to work quickly to rebuild the area SKYWARN structure, with net control stations and spotters.

The Raleigh SKYWARN operation has not been in good enough shape lately. Following some highly charged disagreements and ham radio politics in

See **EC** page 2

All About the W4RAL Packet BBS

East Wake (packet) Bulletin Board Ssystem (EWBBS) is a Radio based BBS (Bulletin Board System) operated by the East Wake Communications Association where a person can send and receive messages to and from other hams all over the world. You can send messages by topic like: Items for sale or want, ARRL bulletins, homebrewing,

cooking recipes, to explain some of the functionality in the W4RAL BBS system.

The BBS EWBBS originally got it's start as the N1GMV BBS, or GMVBBS for short. John N1GMV ran the system for some time, and then had to take it off-line when he moved. It seemed as if the area would loose BBS

See **W4RAL** page 8

M
RA

EC from page 1

1996, SKYWARN administration changed hands. Bill Leach KB7LX took over as EC for what was supposed to be just 6 months. With the notable exception of Hurricane Fran in September, there has been little extreme weather since then. We've had two mild winters, a nearly thunderstorm-free spring and summer in '97, and no hurricanes. In that period, there were no net control training sessions. With little to hold them together, and the bad taste of politics to remember, many of the net control stations drifted away.

As this spring's thunderstorm season grew, Thomas became concerned. He maintained contact with the Raleigh NWS office, and when they could no longer contact anyone else to run a net, they called Thomas. He found himself, and just a handful of others, running SKYWARN nets with increasing frequency — and with no "official" position. When it became clear that the situation wasn't going to improve without action, Thomas volunteered to take the position as SKYWARN EC.

SKYWARN is part of the ARRL Field Organization, and North Carolina Section Manager Reed Whitten, AB4W, was

See EC page 6

The Raleigh Amateur Radio Society, Inc. (RARS), was founded in 1969 and continues to serve and support the Amateur Radio community in the Greater Triangle area.

The Objectives of the club are to promote worldwide friendship through Amateur Radio; to be of public service by providing radio communications in times of disaster, emergency, or civic need; to educate members in radio technique and to assist in obtaining Amateur Radio licenses.

All persons interested in Amateur Radio are eligible to apply for membership to the club. Dues for regular licensed amateurs are \$18.00 per year (from July 1 through June 30). Additional immediate family members pay \$5.00 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12.00 per year. Dues for non-licensed Associate members are \$9.00 per year. Regular membership dues prorate for new members.

Applications for membership may be obtained from the officers listed below from the newsletter editor, or at any RARS meeting.

President	Gary Pearce, KN4AQ 116 Waterfall Court Cary, NC 27511 (919) 380-7286 Email: kn4aq.gary@mms.net
Vice President	Pat Fix, KE4FCJ 324 Silverberry Court Cary, NC 27513 (919) 677-8320 Email: pfix@pagesz.net
Secretary:	Jeff Wittich, AC4ZO 211 Dundalk Way Cary, NC 27511 (919) 362-9456 jwittich@pagesz.net
Treasurer	Mike Murphy, WA4BPJ 7329 Barberry Court Raleigh, NC 27515 (919) 847-4641 wa4bpj@pagesz.net

The EXCITER is published monthly by the Raleigh Amateur Radio Society, and is mailed at no cost to its members. Letters to the Editor, technical articles, items of interest to the ham community and guest editorials are actively solicited.

Articles published in the EXCITER do not necessarily represent the views or carry the endorsement of club officers, Board of Directors, EXCITER editor or the membership. Articles will be printed at the discretion of the editor, and no article will be published unless it is accompanied by the name(s) of the person(s) submitting the article.

All copy for publication in the EXCITER must be in the hands of the editor by the end of the Board of Director's meeting on the third Tuesday of each month. Articles may be hand written, typed, or in electronic form as an ASCII file or on disk, transmitted via telephone modem, or over Internet to any one of the officers or the EXCITER editor.

Amateur Radio-related items for sale by the members can be advertised without charge for one issue, but may be resubmitted as often as desired. These ads must be noncommercial in nature.

Commercial ads will be run in return for the following donations to the club:

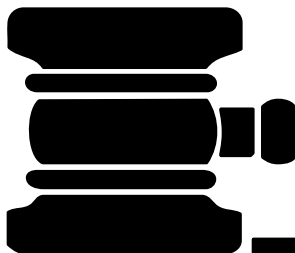
	Single Issue	Full Year
Business Card	\$ 7.50	\$ 75.00
Quarter Page	\$ 11.26	\$ 112.50
Third Page	\$ 15.00	\$ 150.00
Half Page	\$ 22.50	\$ 225.00
Full Page	\$ 50.00	N/A

Commercial Ads must be of "camera-ready quality", and cannot be sent by Amateur Radio. Due to the reprographic process used, no color copy can be accepted.

Contributions, inquiries, comments concerning EXCITER content, advertisements, and mailing problems should be directed to your EXCITER editor:

Walter Price, KM4BU
3000 Woodland Park
#1011, Houston, Texas
(281) 848-0133
waltreid@aol.com





PRESIDENT'S CORNER

By Gary Pearce, KN4AQ

Hamfest Success

Thank you, everyone, for all your effort at the hamfest!!! The hamfest was successful, although we've been following the national trend with slightly lower attendance the past few years. Just under 3000 attended this year, compared to about 3200 last year and 3500 in 1996. Better news came in the flea market, where we sold out all tables for the first time ever. The set-up crew scrambled to accommodate everyone, shuffling tables out of the social as soon as it was over. Hamfest Chairman Cyndi KD4ACW should have a more detailed report, complete with a list of everyone who volunteered, in the next Exciter (she's a little busy planning a little social engagement right now).

Goin' to the Chapel, and were...

That little engagement is a wedding. Our wedding. I guess it's no secret, but by the time you read this, Cyndi and I will be husband and wife (ooh, those words sound strange).

She'll be taking my name to become Cynthia Wood Pearce, though I threatened several times to change my name to Gary Wood. Might still do it. I also suggested many times that we have the event in the sombrero at Pedro's South of the Border. Lots less trouble. Thanks for all the congratulations and condolences. For those wondering, I've installed a low-pass filter, and no harmonics are being generated... at least for now.

Are we HF or are we not?

I heard a rumor that one of our members was a bit irate, venting a bit of spleen toward the folks at the RARS membership table at the hamfest. I hope it's not true — the Murphy's don't get paid to handle membership applications and renewals, and they didn't sign up for abuse.

The subject of the rumored ire, though, was one I'm concerned about: RARS lack of support for HF operators. It seems the club does a lot for VHFers, particularly those on FM and repeaters. But what

have we done for the HFers lately?

Well, there's Field Day and other club contest stations, meeting programs, social events, the outgoing QSL bureau, Elmering, the RARSfest, and major support for the DX PacketCluster for starters. But what else do you have in mind?

Let me say this, though. RARS is not a public utility. We're not CP&L or the phone company. You don't pay your bill, sit back, flip the switch and expect service. We're a ham radio club. You get out of it what you put into it, or maybe a lot more. But if your not getting anything out, check how much you're putting in. We like being a large club, and we want you to be members. But if you want the club to be doing something in particular, what are we supposed to do — hire someone? YOU do it!

One area that has been lopsided toward VHF is the Exciter. That's because I write a lot for the Exciter, and I'm primarily a VHFer (my HF dipole just fell down, but Jeff AC4ZO has re-stringing it as a high priority — he's eager for our next high-speed CW contact).

What would it take to get more HF articles in the Exciter? YOU! You gotta write them! We don't want the Exciter to be

See President page 6

RARS REPEATER UPDATE

It's finally happened. The "Bayleaf" tower, the 375 foot tower in north Raleigh that's been home to the RARS 146.64 repeater for more than a decade, is being dismantled. By the time you read this, it should be gone, and with it, our coverage from the repeater.

The tower was standing in the way of progress. Well, more accurately, it was LEANING in the way of progress. The new north Raleigh expressway (sometimes confusingly called the "outer loop") is under construction, and one of the guy wire anchors from the tower was located smack in the middle of the highway's route. The tower itself stood safely beyond the edge of the roadway, but without its guy wire, the tower wouldn't stand at all. By early April, land had been cleared in the area next to the tower, and the dismantling project began. At least we got to use the repeater through the hamfest.

The tower site itself has changed hands. It had been owned by CableVision of Raleigh. Many years ago, it was the receiving site for broadcast signals on the Raleigh cable system. When the FCC barred cable companies from importing TV station signals from outside the local area,

CableVision didn't need the tall tower, so they moved their operation to a much shorter tower along Six-Forks Road in north Raleigh. They continued to maintain the Bayleaf tower, in use by community repeaters, paging systems, the old "IMTS" mobile phone service, and more recently, a Sprint cellular site. And, they donated the antenna slot at the very top of the tower to RARS. Sprint, now 360° Communications, purchased the site, and recently built a smaller, 250 foot free-standing tower, just a few dozen feet from the old tower. They have also made space available for us on that tower, and the 444.525 and 224.64 repeaters will come back on the air there soon.

There's not enough room on the tower for a full-size two-meter antenna, though (a repeater antenna is about 20 feet long). Instead, we have received permission to put the 146.64 repeater on the Highway Patrol tower, across Blue Ridge road from the state fairgrounds. We're holding off committing the money to that project until we're sure it's the best available site, but it looks like that's where it will go. And speaking of money, the tab for the repeater move is being picked up by the Department of

Transportation.

We're also waiting for delivery of a brand new repeater, built by Danny Hampton K4ITL. In the meantime, the old .64 machine is in operation from a temporary site at another Danny - KD4RAA's - business, just a bit south of the fairgrounds. Mike WA4BPJ and several other club members put up a short tower there, and the repeater was carried there Sunday night following the hamfest. The antenna officially stands at "64 feet" off the ground. The repeater isn't setting any DX records at that location, but it is usable throughout Raleigh for mobiles. There's no phone line yet, so the autopatch is turned off (it might be back on as you read this article). We probably won't move any repeater to a new site until we've tested the new repeater for a few weeks in controlled conditions at KD4RAA's.

Meanwhile, RARS members have spread out to all the other area repeaters (some of them call themselves "refugees" from 64). The Graham Repeater Association has offered us use of their new 145.19 machine for club nets, and many members have found them there. If you're still left out in the cold, dial up 145.19, and

Repeater from page 1

plug in 156.7 Hz tone. Some of you have discovered a big wide world of repeaters that you've never tried. Will you come back to 64 when it's back up at a new site?

Watch your e-mail on the RARS-L for updates on our repeater move.



Thomas Babb © 1998 Capital Broadcasting—used by permission.

TONS OF PUBLICITY FOR HAMFEST, SKYWARN

June may be "Amateur Radio Month," but you'd think that April was, with all the media attention we've been getting. After hearing the SKYWARN net in the background (and not all that far in the background) on WRAL-TV Channel 5 as they interrupted programming for weather updates recently, PIO and new SKYWARN EC Thomas Babb got the ball rolling with a call to the



North Carolina Governor James Hunt has proclaimed June "Amateur Radio Month" in honor of Amateur Radio's contribution to emergency and public service communication. The proclamation was issued thanks to the efforts of members of the Mecklenburg Ama-

JUNE PROCLAIMED "AMATEUR RADIO MONTH" IN NORTH CAROLINA

teur Radio Society in Charlotte. The original will hang at the W4BFB station in Discovery Place. You can view and download a copy from the NC-ARRL web site (<http://www.ncarrl.org>). The proclamation should help fuel publicity efforts for Field Day.

64 on 64 from page 1

which Mike WA4BPJ did the most of it, but it was also a lot of fun. I imagine Gary will probably officially credit all the people who put in some work but, Mike (and family), Alan, Lynne, Max, Gary, Bernard, Chuck, Mike (KE4OQO), were some of the group that donated time, money, or elbow grease.

And of course Danny Mustin, is providing the site.

Bill (KD4LLQ) took the digital pictures [shown on page one and elsewhere. Thanks Bill—Ed.] that I am sure he would be happy to email you for anyone interested in seeing the work at the site.

Fred KE4IXL

station. They came out and did an interview that day, as did WTVD-TV Channel 11. WLFL-TV Channel 22 and WNCN-TV channel 17 got on the bandwagon a few days later, and called RARS President and PIO Gary Pearce

KN4AQ, requesting interviews. Unfortunately, the WLFL news crew got called to a breaking story just before getting to Gary's house. And the WNCN crew, set to do a live interview

See SKYWARN page 10

EC from page 2

also concerned. He talked to several hams regarding the EC appointment, and, in consultation with George Lemmons at the NWS office, offered the appointment to Thomas. Reed announced the appointment on the VHF ARRL net on April 14th.

Thomas will need your help. If you're interested in becoming a SKYWARN net control station, contact Thomas on the air (usually on the 147.195 repeater, 88.5 Hz PL), on the phone (557-7008), or by e-mail (TBabb1022@aol.com).

Editor's Notes

This EXCITER has been published under exile here in Houston, Texas. Thanks to the technologies available, I have compiled your submissions into a finished file that is rendered in Adobe Acrobat and emailed to Raleigh for printing at

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with Thomas for the 11:00 news, had to cancel when thunderstorms blew in — they don't like having their 40 foot mast up in the air when there's lightning around.

Both stations promised future coverage, and they delivered. In fact, all four stations showed up at the RARSfest on April 5th, and ran stories on their newscasts. Then, just two weeks later, WRAL and WLFL visited Thomas again for additional SKYWARN stories.

Good press wasn't confined to the Triangle area. Gifford KC4SAM passed along a great article he found recently in the New York Times, which explored how ham radio was getting ready for the next century. All this great PR is a credit to the work of the hundreds of area hams and RARS members who make the programs receiving the publicity successful.

Advertise in the Exciter!

President from page 3

eight pages of filler culled from ARRL bulletins and the internet. We want it to be locally written, about what club members are doing. You spent a couple grand on that computer with the fancy word processor you don't know how to use... get writing! The editor has e-mail, we need the stories, and you need the practice.

Perhaps someone can begin with a letter to the editor, complaining that there are no HF articles.

Doin' Things—Fox Hunt Weekend

Here's someone who got off his duff and acted: Lyn W4WDN wanted to see Fox Hunts resurrected, so he pushed some buttons to make it happen. It's next weekend as I write this, and last weekend as you read it (declared National Fox Hunt Weekend by CQ-VHF). Sorry I couldn't be there (Cyndi didn't put it on the honeymoon agenda). I hope

See President page 8

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MS-150 TO FOLLOW NEW ROUTE IN SEPTEMBER

The MS-150 will be following a new route this fall. The MS-150 is the two-day, 150-mile bike-a-thon that RARS and area hams provide communications for. The date for 1998 is Saturday and Sunday, September 26 and 27. And the new route will begin in Clayton on Saturday. The cyclists will ride to Kinston and spend the night, and continue on Sunday to finish at Emerald Isle, on the coast. The riders will be bussed back to the starting point once they've finished.

This will mean some changes in our radio communications. Since 1991, the MS-150 route ran from Greenville to Camp Seagull, on the Neuse River inlet east of New Bern. The bikers rode to the camp on Saturday, and rode back to Greenville on Sunday. The

entire route was covered well by a single repeater, the PCRN's 1800-foot Trenton machine on 145.21. That repeater provided mobile coverage everywhere, and HT coverage for most of the route.

The Trenton machine will still be an important part of the coverage network for the new route, but it won't reach all the way to the starting point in Clayton. We'll probably ask PCRN for use of the 146.88 machine (and very limited use of the PCRN network), but no firm plans have been laid.

The MS-150 is a lot of fun, and a very busy event for radio communications. We always need more help than we get, so mark your calendar and talk to Jerry KD4YJV about helping out.

NEW LINKED UHF REPEATERS COME TO TRIANGLE

by Gary Pearce KN4AQ

The Graham Repeater Association has installed two new UHF repeaters in the area, featuring full-time linking between Raleigh and Greensboro.

The new repeaters are:

444.825 (156.7 Hz PL) in north Raleigh, on Strickland Rd. near Six Forks (co-located with the new 145.19 machine).

443.425 (146.2 Hz PL) near the Sheraton in RTP.

The other linked repeaters in the network are:

442.050+ w/107.2hz PL in Efland.

443.725+ w/156.7hz PL in Graham.

See **Linked** page 8

NET MANAGER TO BECOME BOARD POSITION

The RARS Board of Directors has decided to elevate the job of Net Manager to a voting position on the Board. Mike Milan KE4OQO is our current, appointed Net Manager. Mike has taken an active interest in club operation (including vol-

unteering to be Hamfest Security Chairman for two years in a row). When the board sees this kind of interest, it acts to rope the poor sucker... er, dedicated club member into as much responsibility as we can.

Only you can prevent forest

fires, and only you can elect board members, so Mike's name will be placed in nomination for a vote at the May meeting. Nominations will also be taken from the floor.

Linked from page 7

444.225+ w/146.2hz PL in Greensboro.

While linking is not new to the Triangle area, full-time linked repeaters are something we haven't seen before. Most of us who have experienced linked repeaters here have used the PCRN network. PCRN links VHF repeaters with a UHF backbone. The VHF repeaters are brought into the network when requested by touch-tone command, and dropped off the network when the user is finished. PCRN requests that linked repeater use be kept brief, because each VHF repeater is frequently busy all by itself.

The GRA philosophy is different. The repeaters are fairly local coverage, UHF machines, as opposed to the 1000-foot-plus VHF behemoths on PCRN. Individually, they aren't used more than an hour or so a day. Linking them full time raises the activity of all the machines. And that's not just because they're linked — the link generates activity as operators in all areas can communicate with each other.

But GRA repeater-builder David Thompson K4GWH is quick to point out that local users should not hesitate to use any of the machines, just because it's linked. "Treat them

like local repeaters if they're not already in use," Dave says. "We want to see the activity. If they get too busy, we'll build more."

I guess that makes them the Dorito's of the repeater world — talk all you want, we'll make more. And it's fun. The other day, I was walking down the street in downtown Raleigh with my HT, talking to Fred N4GGD, who was similarly equipped in Greensboro. He sounded like he was next door.

There are a few other linked systems in North Carolina. As I drive west past the Triad, I hear several UHF machines linked full time. Some of KD4JFN's machines are linked, in the Pittsboro - Burlington area. The northeastern part of the state has a few repeaters linked on VHF and UHF, from Rocky Mount to the Outer Banks. I'm happy to see more right here in Raleigh.

For more info, check out the GRA's web site: <http://www.netpath.net/~n4mio/gra.shtml>

By the way, the GRA is looking for local user donations to offset the cost of running the machines. One prime donation-attractor, an autopatch, is not planned, although that is a possibility if the 145.19 repeater attracts enough support and the users want it.

President from page 7

the turnout was good. I'm sure those attending had fun.

Thanks, Lyn!

CLASS CONGRATS

And thanks, Lynn, KO4QH, for putting together another successful RARS class. More than 20 new hams, with shiny new KD4W— callsigns have been hitting the airwaves in the past few weeks. One of them is already an Advanced class ham! Welcome to you all.

73 de KN4AQ Gary

486: The average IQ needed to understand a P.C.

State-of-the-art: Any computer you can't afford.

Obsolete: Computer you own.

W4RAL

from page 1

coverage, until Ronnie Reams, WA4MJF decided to pick it up and "keep the ball rolling". Ronnie and John got together, fleshed out the new system, and away it went. I'm not sure who donated the original equipment, but as time goes on I'm sure I'll add more history here. One thing is for certain...their efforts, the efforts of others, and all donations are very much appreciated by the many packet BBS users in

See W4RAL page 9

W4RAL from page 8

the area! The system is also known as W4RAL BBS with the callsign of W4RAL, and uses an alias of "EWBBS" to make it easier to remember and connect to.

Along with providing BBS system access, the system passes a lot of "through traffic" and serves as an important link in the global packet network. The BBS, or Bulletin Board System, is a central computer where messages are stored for a period of time to allow users to read and reply to them, or generate their own messages to be sent out to other locations. It is the hub of the system, that is to say that many radios on different frequencies and operating at different baud rates are interconnected through special TNC's (a radio modem of sorts).

The BBS has the intelligence to sort the various messages and route them to the correct frequency(s), store them if they are sent to a user of W4RAL, forward them if they are for a user of a different system, post them for all to see if they are public messages, perform house-keeping when necessary, etc.

I mentioned that the bbs is part of a Global system; it's connected to a network of similar systems that span the planet. When a public message is sent, it appears on all BBS's all over the

world (if it's addressed to ALL@WW-everyone world-wide). A user can connect to any BBS, anywhere in the world and read the same messages! Another neat feature of this system is that one can send a message to another ham anywhere in the world through the BBS, no matter of the frequency of the BBS in the distant user's area. They simply connect to the BBS nearest to them and receive their message!

Let's connect and get your feet wet! We'll pretend, just for this initial demonstration, that you are in range of the BBS and can connect to it directly. However, most of you aren't that close...but don't worry, we'll cover the methods used to "relay" or "digipeat" in from a distance in a bit. The W4RAL BBS has 2 user ports, and can actually be accessed on all four of it's frequencies. The BBS frequencies are: 145.01 (1200 baud) used mostly for BBS-to-BBS traffic 147.54 (1200 baud) user port 223.70 (9600 baud) user port 441.00 (9600 baud) used mostly for BBS-to-BBS traffic The BBS-to-BBS traffic frequencies can be used in a pinch, but it's discouraged to use the "backbones", if it's at all possible to connect to the user ports.

So, dial up a user port frequency on your packet rig, type "ctrl-C" to set your TNC to the

COMMAND mode, and type "C W4RAL" to connect. You can also connect by using the BBS's alias (EWBBS) by typing "C EWBBS". Some people find it easier to remember the alias rather than the callsign. Don't type my "" quotes, I'm just using them to make the required commands more obvious. Once connected, you'll be asked a series of questions (as a new user) for the BBS's database about where you live, your name, zip code, etc. Complete the questions, and you'll be taken to the main prompt.

By the way, once you've completed the questions, you won't be asked again in the future, unless the bbs loses your info during a software upgrade, etc. The BBS menu works similar to DOS help files. First type "? h" for a full listing of menu items. If you want a better explanation of a specific menu item, type "? menu-item-letter".

Example: If I wanted a better description of the "S" send menu command, I'd type "? S". You'll find that the BBS is very easy to use, and operates much like a standard telephone BBS. I'll soon have the full list of BBS commands here, and their descriptions, but for now we'll just touch on a few of them to get you going.

See W4RAL page 10

W4RAL from page 9

“LM” lists only messages to you “L” lists the titles and message number of all messages on the BBS since you last connected “R #” allows you to read any message base on it’s message number “S callsign” allows you to send a message to someone else on the packet network “SR” allows you to send a reply to the last message you just read “K #” allows you to erase (kill) a message you wrote by it’s message number “T” shows you who is currently connected to the system, and who has mail waiting “?H” shows you the full list of menu selections available “? menu_letter” shows you more details for that specific menu item “B” logs you off of the BBS, and remembers where you were in the message base EXAMPLES.

Let’s imagine, that when you “L”isted the messages on the BBS (and there will be a BUNCH of them the first time you log in!), that you saw a message numbered 3456 that you wanted to read. From the prompt, you’d type “R 3456” and hit enter. The BBS will recall that message for you and you’ll be able to read it. OK, Let’s say you wanted to reply to that message, you’d type “SR” and hit enter. Sometimes the BBS might ask “What message number”, to which you’d reply “3456” and hit

enter. The BBS will automatically take care of the return address for you, so you can type away to your new friend. When finished typing any letter, always hit enter to get to a blank line, then type “/EX”.

That closes the email and sends it to the BBS for forwarding through the packet system. The next exercise will be to send an email to someone from scratch. You need to know their callsign, and their “home bbs” address. To get you started, I’ve compiled a list of TEARA members who are one packet BBSing, complete with their home bbs address. Here’s what the address for Ed KD4VPQ looks like on packet radio:

KD4VPQ@W4RAL.
#RTP.NC.USA.NOAM. If you’re sending to someone on the local systems (N4WUF, WR4AGC, W4RAL, KD4GAA, etc.), you only need to know the BBS call, and the system can route it for you. If you’re logged onto the BBS that is that person’s homebbs, you only need to send the note to them (without the bbs info) and the system will assume it’s for that very BBS. So, to send a note to Ed, you’d connect to a BS somewhere, and type “S KD4VPQ@W4RAL.
#RTP.NC.USA.NOAM”. The BBS will then ask you for a topic, and I’ll just put in “HI!”, and strike enter. Then I’m ready to type. After I’m finished typing

the message, I’ll go hit enter a couple times to get me to a blank line, and type “/EX” and hit enter once more. That’ll close the email and send it on its way.

All messages, as you’ll see the first time you list them all, aren’t just to and from individuals. Many are posted public with titles like “SALE” or “WANTED” or “DX” or “HELP”, etc. In that case a person would send a message to everyone by typing (this will be an example of a wanted message): S WANTED@ALLUS. There are a few things you can put after the @symbol that sorta determine how far it’ll go. @ALLNC goes just in NC. @ALLUS goes U.S. wide. @WW goes world wide...etc. You’ll pick those up when you start looking at others’ messages that are on the system. Don’t forget to “K”ill personal messages to you when you finish reading them. You do this by typing “K message_number” and hit enter.

You can only kill stuff you send and personal stuff sent to directly. This saves space on the hard drives, and makes maintenance a lot easier for the sysop, hi! NODES Now, if you’re like most everyone else, you’ll find that you’re too far from the actual BBS to dependably connect to it on a routine basis. Most BBS’s are run from an amateur’s station and are connected to rela-

tively low altitude antennas.

The BBS does all of the data storage and routing, and the remote nodes bring the distant users to the BBS. Here's where the digipeaters (nodes) come into play! You can think of a node as a repeater of sorts, but occupies a single frequency as opposed to a conventional voice repeater requiring two frequencies. It receives packets, stores them temporarily, and then retransmits them as soon as they are finished (if the frequency is clear). Currently, W4RAL has the following nodes: W4RAL-6 on 145.01 (1200 baud) in Clayton at 200' W4RAL-7 on 147.54 (1200 baud) in Zebulon at 170' WB4IUY-7 on 223.70 (9600 baud) N.E. of Rolesville at 130' W4RAL-5 port 1 on 147.54 (1200 baud) South of Rolesville at 50' W4RAL-5 port 2 on 441.00 (9600 baud) South of Rolesville at 50' W4RAL-5 port 3 on 145.01 (1200 baud) South of Rolesville at 50' W4RAL-5 port 4 on 223.70 (9600 baud) South of Rolesville at 50' Nodes being planned are: UHF 9600 baud node in Clayton for a south-east UHF backbone VHF 1200 baud node on 145.01 near Spivey's corner VHF node on 145.01 in Vance County at Kerr Lake BPQ node in North Raleigh on 145.01, 147.54, 223.700, and 441.0 HF node on 10 meters to tie into the BBS Possible 6 meter node to tie into the BBS.

When you connect to a node, you can list the many functions available at a node site by typing "?" and hitting enter. It will return a menu to your station. One of the features found on most nodes is the ability to "see" the stations that the node is hearing from its substantial altitude. The command on most nodes is "MH" for "Me Heard". Other nodes use the command "J", but it will be explained in the node menu. On most single port (single frequency) nodes, one can simply connect to the node, and type "MH" at the prompt. The node will then send back a list of callsigns and the times that it heard those other stations. Typically, a node is used as a "jump point", where one will then connect to the next node or BBS in the area. Example, if you're a little ways out, and can't connect to the W4RAL BBS directly from your QTH, you can do it like this: Pick a user node...I'll use 147.54 W4RAL-7 for this example. Dial up that frequency and type "C W4RAL-7", enter. Once connected, type "C W4RAL" (or its alias "C EWBBBS").

You'll be connected to the BBS. The nodes are fairly high up, or placed at strategic site so as to benefit as many amateurs as possible. Some of the EWBBBS nodes have multiple ports, meaning that they are operating on more than one frequency. An

example is W4RAL-5, where it is simultaneously connectable on: 145.01 (1200 baud) 147.54 (1200 baud) 223.70 (9600 baud) 441.00 (9600 baud) A user can see the available ports by connecting to 145.01, and then typing the "PORTS" command at the prompt. The node will respond with: 1 147.54 2 441.00 3 145.01 4 223.70 W4RAL-5 A user can then connect to another station on a different frequency by typing: C portnumber callsign Example: C 4 WB4IUY-1 A user can also "peek in" on the other frequencies and see what the node is hearing by connecting to W4RAL-5 on any of the above frequencies, and typing "MH portnum" and enter. You'll notice that each of the 4 frequencies above is given a port number or channel, so to listen in on the 440 port, you'd type "MH 2" and enter.

No matter that the 220 and 440 ports are at 9600 baud (if you're at 1200 baud), the node will automatically make the baudrate conversion for you. Should you see another station on one of the ports that you wish to connect to, simply (stay connected to W4RAL-5) type "C portnumber the_call_you_wish" and the system will take you through the gateway and on out on the other frequency. Example: to connect to KN4AQ-1 on port 2 (441.0) type "C 2 KN4AQ-1 "

See W4RAL page 12

W4RAL from page 11

Pretty neat! 145.03 1200 baud 3D223.70 960 baud Gateway! There is now a new gateway running that will allow a 1200 baud 2 meter user on 145.03mhz to jump to 9600 baud on 223.70 mhz.

The local LAN and Backbone frequencies do occasionally get congested, and some of the users in the Wilson area occasionally have a hard time staying connected to the BBS during these busy times. I've installed a gateway system on my tower at about 100'. The VHF yagi is pointed towards Wilson, to give them priority and easier access to the W4RAL BBS via the gateway. To see if you can connect, first try to connect to my mailbox on 145.03 directly. Type: "C WB4IUY-1". If you get in, you're a candidate to use the gateway. Next, disconnect (you can't use the gateway if you're already connected to me). To connect to the W4RAL bbs via my gateway, type: "C W4RAL VIA WB4IUY-3" and enter.

You should find that access is fast, especially since the 220 port on the BBS is pretty quiet. You can also connect to the W4RAL-5 multi-port node via the gateway by (disconnect from me!) typing "C W4RAL-5 VIA WB4IUY-3" enter. Once you're connected, you can do the same stuff I talked about above with the W4RAL-5 multi-port node. For those of you who live farther east, and can't connect to my mailbox direct in the first test

above, try digipeating through K2IMO's BBS in Wilson. K2IMO always has a strong signal into my station, and he is set up to digipeat as well. If you can connect to K2IMO-1 BBS in Wilson OK, try this (be sure not to be connected to anyone)...type: "C WB4IUY-1 VIA K2IMO" for my mailbox, or "C W4RAL VIA K2IMO,WB4IUY-3" for the BBS, or "C W4RAL-5 VIA K2IMO,WB4IUY-3" for the W4RAL-5 multi-port node. OK??

That'll give you something to play with for a while, hi! For more information about the EWBBS system, you can contact Ronnie at his packet address of WA4MJF@W4RAL. #RTP.NC.USA.NOAM or his internet address at wa4mjf@juno.com. There are lots of things one can do with nodes, and I'll be adding more stuff a little later. *Tnx TERA and WA4MJF*

Editor from page 6

Kinkos. Thanks N4YRD for taking care of printing the master for duplication.

The latest roster is converted each month to a DBF file supplied by Mike WA4BPJ, for printing bulk mail labels. If you move, please send Mike, your new address (see inside front cover). Bulk mail does not forward—no update/no EXCITER.

Thanks to your recent submissions, these EXCITERs have had excellent local content. FB!

Here in Houston, the size of the city precludes the formation of just one club. In Raleigh, we may think nothing of driving in from Knightdale or Durham for a club meeting. Houston is just too big and filled with traffic for that. There are also clubs that only sponsor repeaters or only sponsor HF operations. I have been thrilled that RARS has been a little more general than that.

Over the years we have done many things. RARS is a club rich in experience and interest. That's really hard to obtain elsewhere but a golden achievement for Raleigh. If you need help with something pertaining to Amateur Radio, there is usually someone in the club that can help you.

If you as a member seek out new experiences in Amateur Radio through RARS, it makes the club strong. Start a special interest group. Reactivate an existing inactive group. Enjoy Amateur Radio!

I will continue as EXCITER editor until a local editor takes over. That may be as soon as next month. Submit your articles to Gary Pearce, KN4AQ (kn4aq.gary@mms.net) so he can route to whoever does it next. Thanks for your support. It has been great fun!

73 de KM4BU Walt

Did you know...

That if you work someone on the air, and they tell you that you are their first contact on ham radio, that you can award that person with their first operating award? Just send a letter to The American Radio Relay League Headquarters, and tell them about the QSO (Date, time, freq, and your name and call). Send this letter, and a stamped envelope addressed to the new ham to the awards desk at headquarters,

and they will a the First Contact Certificate in the envelope which you have provided, and drop it in the mail. If you use a 9X12 envelope, then the certificate will arrive with no creases in it.

If you're a RARS member, the Club can do much of this for you. Just call the Secretary and let him know about the QSO, and the Club handles the rest. Questions or Comments? Call Jeff - AC4ZO, 919-362-9456.

order by KN4AQ at 7:41p. Members present were: KN4AQ, WA4BPJ KM4BU, KE4FCJ, K4HF, WD4RDT, KC4UPX, W4VFJ, and AC4ZO. The total attendance was 15.

The agenda was distributed, and additions were listed.

The minutes of the February meeting were reviewed. On motion by W4VFJ, seconded by KE4FCJ, the minutes were approved.

Officers' Reports:

WA4BPJ gave the Treasurer's report, and said that the checking account balance is \$12,751.23; savings is \$4,165.36; and the investment account is \$13,338. RARS membership is 316.

Committee Reports:

The report from the Education Department is that Lynn, KO4QH is in the hospital with double pneumonia. The Board and Members all wish her well. The class is well under way, and is going well, but is larger than anyone expected.

K4HF gave the Hamfest Committee report. He said that things are going well, and that booth sales look good, with possibly a slight increase over last year. There are no more hamfest committee meetings planned before the fest. WD4RDT reports about 300 tickets, and 220 tables have been mail-ordered so far.

KM4BU announced that this would be his last Board meet-

See Board Meeting page 14

New Raleigh 2m Net on 145.13!

A new Raleigh 2m "Late Net" occurs Thursdays on 145.13. A new net is being planned for Thursday nights at 11:03 pm for the 145.13-W4ATC/NCSU StARS/RARS Raleigh repeater. Everyone is invited to participate.

Anna KF4USQ and Israel N4ZVU plan to begin each net with a 15-minute rebroadcast of one or more segments from any number of various ham radio news programs. Afterwards people are encouraged to discuss the topics of the news programs, or whatever else is on your mind.

This will be a loosely-structured, informal net designed to give everyone a chance to chat. Please don't say "check me in and out" but let everyone know

if you have an opinion on the subject du jour. Y'all check in now, ya hear?

*Replies/questions to Anna
KF4USQ(abneave@eos.ncsu.edu)
or Israel N4ZVU*



March Board Meeting March 17, 1998

The monthly Board meeting of the Raleigh Amateur Radio Society was held at the Forest Hills Baptist Church on March 17. The meeting was called to

Board Meeting

from page 8

ing, as he is moving to Texas.

At this point, the agenda was amended to add the item of Net Manager Position to New Business.

KC4UPX gave the FM Committee report. He said that the antennas for the 220 and 440 repeaters have not been received yet, and the issue is being worked. He expects to have information on the whereabouts of the equipment in a day or two. Negotiations with 360 Communication continue to be favorable. K4ITL is waiting for a schedule from RARS so he can plan delivery of the new 146.64 machine, and the plan of moving .64 to a temporary location at Musten Communication is still in the works, and hardware is being collected.

Unfinished Business:

KE4FCJ has been working on getting information from the church about what kind of tables they would like. Since she is still working the issue, the item of Tables For The Church has been deferred until the April Board meeting.

New Business:

The subject of the Traders Table at RARS meetings was brought up. Mike, KE4OQO, is no longer able to oversee the operation, and would like to be

replaced. KN4AQ accepted the action item to speak to Alan, AB4OZ, before recommending a solution.

There was an agenda item concerning disposal of the Rarsfest computer. The item was owned by KD4ACW, but in her absence was presented by AC4ZO. Many ideas were discussed, and several motions were made, amended, and withdrawn. Finally, a motion was made by AC4ZO, seconded by WA4BPJ, that we announce to the membership the availability of the computer, and that we are accepting closed bids from club members until the April meeting, with no minimum bid specified. The motion passed, and it was resolved that bids could be placed on the RARS Hot Line (919 387-9836) and will be accepted at the April meeting. The winning bid will be announced then at the April meeting.

The issue of the Exciter was heard. The Editor, Walter KM4BU is moving to Texas :(and the position is becoming available. Lots of logistical problems associated with the production of the Exciter were discussed, and the item was disposed of by the appointment of a Nominating Committee chaired by K4HF, to secure a new Editor.

KN4AQ brought up the issue of organization of the Board. Specifically, the positions of

Public Service Director, and Net Manager. He illustrated the history of these two positions, and how they interact. After a small amount of discussion, on motion by KM4BU, seconded by W4VFJ, the Board voted to elevate the position of Net Manager to a Board Seat. A Nominating Committee chaired by K4HF was appointed to fill the position.

Announcements and Comments:

K4HF announced a meeting with the NC State Fairgrounds staff on Thursday, 19 April in the administration building.

KM4BU said a few words about his early days with RARS, and his last days. Many kind words were spoken, and Walter pointed out that usually when a lot of people are speaking so kindly about someone, it is at their funeral. After assuring Walter that this was not his funeral, a round of applause was given him for his many accomplishments and contributions to the club.

With this completing the business, on motion by W4VFJ, the meeting adjourned at 9:23p

Respectfully submitted, Jeff Wittich, AC4ZO - Secretary

CQ Field Day
—Next Meeting!

Regular RARS Meeting

April 7, 1998

The regular meeting of the Raleigh Amateur Radio Society was held on April 7, 1998 at the Forest Hills Baptist Church on Clark Avenue.

The meeting was called to order at 7:34p by President Gary Pearce, KN4AQ. Gary welcomed 87 members and 5 guests. He then gave the Treasurer's report in the absense of WA4BPJ, and said that the RARS checking account contains about 12K, the Savings account is 4.1K, the investment account is 13.4K and we have about 325 members. Lynn, KO4QH, announced that the RARS Spring classes are over, and that the success rate among the 24 students was good. Also, the Education Department has received the ARRL Novice/Tech class video tapes.

Cyndi, KD4ACW, commented on the RARSFest. She said the attendance was about 2,963 which is down from last year. A show of hands indicated nearly one hundred percent attendance by the members present. At the testing session, there were 54 examinees. At this point, Jeff, AC4ZO, held the drawing for the incentive prize. The prize

was an ICOM IC-T2A 2 meter HT. There were 411 tickets in the drawing, representing 107 different people. The winner was Josh Tate, KF4EAG.

Bernard, KC4UPX gave an update on the repeater situation. He said that the .64 machine has in fact moved to its temporary location at Musten Communication. Issues with the NCHP are still being worked. Also, work is progressing on a site plan with 360 Communications for the use of their sith for the 220 and 440 repeaters. We then saw video footage of the new Bayleaf tower site.

Judy, KE4JRL, announced that she has for sale tickets to the Durham hamfest, scheduled for May 23. President Pearce announced that the budget talks will begin at the April Board meeting, and invited any interested guests to attend.

Jeff distributed certificates to the new initiates to the Royal Order of the Wouff Hong. Only a few were present. Jeff also announced the new and improved RARS Hot Line. He explained a little about what information was on it, and announced the number, 387-9836.

Gary announced the need for a new Exiter Editor. We have lost the last two to Texas. Gary then showed a couple of video clips from recent news broadcasts that highlighted ham radio. He explained that ham radio has received some excellent press lately.

Cyndi addressed the bid opening for the hamfest computer. This issue is of a computer purchased a couple of years ago by the hamfest committee. The committee no longer has a use for the computer, and no other use was identified for it, so it was auctioned off on a sealed bid basis. The winning bid was placed by J. Diepenbrock, and was \$410. This ending the announcements, the guest speaker was introduced. Doug, N4VEJ, from Baltimore County in the MDC Section, gave a presentation on APRS. Door prizes went to N8OVD, KE4DRJ, KE4QNG, and AC4QX. The meeting adjourned at 9:27p.

Jeff Wittich, AC4ZO Secretary

Robert P. Holmes
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Calendar of Events May 1998

- May 2nd** **RARS Breakfast meeting;** Griffin's Restaurant, 10 AM
Program: Informal gathering for eyeball QSOs. All Hams welcome. Info:
Call Woody KJ4SO, 848-1844
- May 4th** **RARS General Meeting;** Forest Hill Baptist Church, 7:30 PM All are welcome! Info-contact RARS officer. Program: Field Day 98 Preview by Mike Murphy.
- May 18th** **RARS Advisory Board Meeting;** Forest Hill Baptist Church, 7:30 PM All RARS members welcome! Info-contact RARS officer. See page 2
- March 23rd** **Crystals Meeting;** Golden Corral, Hwy 70 W, Info- Lynn KO4QH, 787-1111
- May 30-31** **Special Olympics: Volunteers needed. Contact David Marable KD4WQU 596-8285 to volunteer.**
- Anytime** **Promote Amateur Radio:** Show Amateur Radio to a young person in your neighborhood. You never know where the next Edison, Armstrong, Erhardt, Jobs, Wozniak, or Gates may get their start.